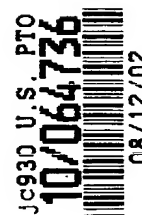


Electronic Filing System (EFS) Data  
Electronic Patent Application Submission  
USPTO Use Only

EFS ID: 17052  
Application ID: 10064736  
Title of Invention: Removing NOx, SO2, and Hg  
from a gas stream using  
limestone regeneration  
First Named Inventor: Francis Alix  
Domestic/Foreign Application: Domestic Application  
Filing Date: null  
Effective Receipt Date: 2002-08-12  
Submission Type: Utility Patent Filing  
Filing Type: new-utility  
Confirmation Number: 0  
Attorney Docket Number: AL.US.12  
Digital Certificate Holder: cn=Phillip E. Decker, ou=Registered Attorneys, ou=Patent and  
Trademark Office, ou=Department of Commerce, o=U.S.  
Government, c=US  
Certificate Message Digest: G/I4nQravbObHF6DcjtYw==  
Total Fees Authorized: \$680.0  
Payment Category: CC - Credit Card  
Credit Card Number: \*\*\*\*\*2004  
Expiration Date: 05312003  
Card Holder Name: PHILLIP E DECKER  
RAM User ID: EFSPROD  
RAM Accounting Date: 2002-08-12  
RAM Sequence Number: 504734  
RAM Payment Status: RAM success  
Postal Code: 03903



## TRANSMITTAL FORM



Electronic Version 1.0.3

Stylesheet Version: 1.0

Submission Type: Utility Patent  
FilingAttorney Docket  
Number:

AL.US.12

# Removing NO<sub>x</sub>, SO<sub>2</sub>, and Hg from a gas stream using limestone regeneration

First Named Inventor: Francis R. Alix

## SUBMITTED BY

Name:

Phillip E. Decker

Registration Number:

39163

Electronic Signature Mark: /Phillip E.  
Decker/

Date Signed: 20020812

*I certify that the use of this system is for OFFICIAL correspondence between patent applicants or their representatives and the USPTO. Fraudulent or other use besides the filing of official correspondence by authorized parties is strictly prohibited, and subject to a fine and/or imprisonment under applicable law.*

*I, the undersigned, certify that I have viewed a display of document(s) being electronically submitted to the United States Patent and Trademark Office, using either the USPTO provided style sheet or software, and that this is the document(s) I intend for initiation or further prosecution of a patent application noted in the submission. This document(s) will become part of the official electronic record at the USPTO.*

## Attached Files:

declaration

al12decla.tif

specification

alus12.xml

fee-transmittal

alus12fee.xml

patent-assignments

alus12asgn.xml

bibd-transmittal

alus12apds.xml

Attached Image File(s):

al12decla.tif

**Comments:**

Applicants and assignee claim small entity status.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN  
 APPLICATION DATA SHEET (37 CFR 1.76)**

As the below named inventor(s), I/we declare that:

This declaration is directed to:

- ☒ The attached application, or  
☐ Application No. \_\_\_\_\_, filed on \_\_\_\_\_,  
☐ as amended on \_\_\_\_\_ (if applicable);

I/we believe that I/we am/are the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought;

I/ we have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment specifically referred to above;

I/we acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me/us to be material to patentability as defined in 37 CFR 1.56, including material information which became available between the filing date of the prior application and the National or PCT International filing date of the continuation-in-part application, if applicable; and

All statements made herein of my/own knowledge are true, all statements made herein on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and may jeopardize the validity of the application or any patent issuing thereon.

**FULL NAME OF INVENTOR(S)**

Inventor one: Francis R. Alix

Signature: *Francis R. Alix* Citizen of: USA

Inventor two: Joanna L. Duncan

Signature: *Joanna L. Duncan* Citizen of: USA

Inventor three: Christopher R. McLarnon

Signature: *Christopher R. McLarnon* Citizen of: USA

Inventor four: \_\_\_\_\_

Signature: \_\_\_\_\_ Citizen of: \_\_\_\_\_

☐ Additional inventors are being named on \_\_\_\_\_ additional form(s) attached hereto.

Burden Hour Statement: This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is used by the public to file (and the PTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This form is estimated to take 1 minute to complete. This time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO Assistant Commissioner for Patents, Washington, DC 20231.

# FEE TRANSMITTAL

Electronic Version 1.1.0

Stylesheet Version: 1.0

*Patent fees are subject to annual revisions on or about October 1st of each year.*

Small Entity

Small Business Concern

**TOTAL FEES AUTHORIZED: \$ 680**

## BANK (CREDIT) CARD INFORMATION:

Credit Card Number: 2004  
Expiration Date: 20030531  
Authorized Name: PHILLIP E DECKER  
Billing Address: 03903

## BASIC FILING FEE

Fee Description	Fee Code	Fee Paid
Utility Filing Fee	201	\$ 370

Subtotal For Basic Filing Fee: \$ 370

## EXTRA CLAIM FEES

	Fee Code	Fee	Extra Claims	Fee Paid
Total Claims: 36	203	\$ 9	16	\$ 144
Independent Claims: 6	202	\$ 42	3	\$ 126

Subtotal For Extra Claims Fees: \$ 270

## ADDITIONAL FEES

Fee Description	Number	Quantity	Fee Code	Amount	Fee Paid
Recording Each Patent Assignment Per Property Fee	00000000	1	581	\$ 40	\$ 40

Subtotal For Additional Fees: \$ 40